DEPARTMENT OF THE AIR FORCE
Headquarters US Air Force
Washington, DC 20330-1030

CFETP 2A7X3
Parts I and II
NOVEMBER 1998

AFSC 2A7X3

AIRCRAFT STRUCTURAL

MAINTENANCE

CAREER FIELD EDUCATION

AND TRAINING PLAN

CAREER FIELD EDUCATION AND TRAINING PLAN
AIRCRAFT STRUCTURAL MAINTENANCE
AFSC 2A7X3

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Supersedes: CFETP 2A7X3, July 1994

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Number of printed pages: 44

AIRCRAFT STRUCTURAL MAINTENANCE
AFSC 2A7X3
CAREER FIELD EDUCATION AND TRAINING PLAN

PART I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training. To read, review, or print a copy of the current CFETP, go to the Aircraft Maintenance Homepage at: http://www.il.hq.af.mil/ilm/ilmm/acmaint/index.html. ***NOTE:*** Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts that are used by supervisors to plan, manage, and control training within the career field.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, training, and other). Section D indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. Section E identifies transition training guide requirements to support career field restructures.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, and technical references to support training; Air Education and Training Command (AETC) conducted training; wartime course requirements; core tasks; and correspondence course requirements. Section B contains the course objective list and training standards supervisors use to determine if airmen satisfied training requirements. Section C identifies available support materials. An example is a Qualification Training Package (QTP) developed to support proficiency training. These QTP packages are identified in AFIND8, *Numerical Index of Specialized Education/Training Publications.* Section D identifies a training course index supervisors use to determine resources available to support training; included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements supervisors use to determine additional training requirements unique to the MAJCOM.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT). Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Air Force Job Qualification Standard (AFJQS). Comprehensive task lists that describe a particular job type or duty position. They are used by supervisors to document task qualifications. The tasks on an AFJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document covering the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure training is budget defensible.

Certification. A formal indication of a trainee's ability to perform a task to required standards.

Certification Official. A person the commander assigns to determine an individual's ability to perform a task to required standards.

Continuation Training. Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task. A task Air Force Career Field Managers (AFCFMs) identify as a minimum qualification requirement within an Air Force specialty regardless of duty position. Core tasks identified with an */R are optional for AFRC and ANG.

Course Objective List (COL). A publication identifying the tasks and knowledge requirements and respective standards provided to achieve a 3-/7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Training.*

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Field Technical Training (Type 4). Special or regular on-site training conducted by a Training Detachment (TD) or by a mobile training team (MTT).

Initial Skills Training. A formal resident course which results in award of a 3-skill level AFSC.

Instructional System Development (ISD). A deliberate and orderly process for developing, validating, and reviewing instructional programs that ensures personnel are taught the knowledge and skills essential for successful job performance.

Mission Ready Technician. A formal course which results in an airman receiving hands-on training and task certification of selected tasks so the individual will be immediately productive upon arrival at their first duty section.

Occupational Survey Report (OSR). A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training at the duty location used to certify personnel for both skill level upgrade and duty position qualification.

Qualification Training (QT). Actual hands-on task performance training designed to qualify an airman in a specific duty position. This training occurs during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required for the job.

Qualification Training Package (QTP). An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment, that preclude desired training from being delivered.

Specialized Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by National Security Agency (NSA), and administered by qualified communications security (COMSEC) maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes an AFS in terms of tasks and knowledge an airman may be expected to perform or to know on the job. It serves as a contract between AETC and the functional user to show which training requirements for an AFSC are taught in formal schools, career development courses, and exportable courses.

Training Impact Decision System (TIDES). A computer-based decision support technology being designed to assist AFCFMs in making critical judgments relevant to what training should be provided personnel within career fields, when training should be provided (at what career points), and where training should be conducted (training setting).

Upgrade Training (UGT). A mixture of mandatory courses, task qualification, QTPs, and CDCs required for award of the 3-, 5-, 7-, or 9-skill level.

Utilization and Training Workshop. A forum made up of the Air Force Career Field Manager (AFCFM), MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SME), and AETC personnel who determine career path training requirements.

Section A - General Information

1. Purpose. This CFETP provides information necessary for AFCFMs, MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2A7X3 should receive to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Normally, this training is conducted by AETC at one or more of the technical training centers. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

1.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Uses. The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, field and exportable training based on requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Identified requirements can be satisfied through OJT, resident training, contract training, or exportable courses. MAJCOM-developed mandatory training to support this AFS must be identified for inclusion into the plan and must not duplicate other available training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The lists of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training.

Section B - Career Progression and Information

4. Specialty Description.

4.1. **Specialty Summary.** Designs, repairs, modifies and fabricates aircraft, metal, plastic, composite, advanced composite, low observables, and bonded structural parts and components. Applies preservative treatments to aircraft, missiles, and support equipment (SE). Related DoD Occupational Subgroup: 603.

4.2. **Duties and Responsibilities.**

4.2.1. Assembles structural parts and components to meet requirements for preserving structural integrity and low observable qualities. Assesses damage to aircraft structural components and low observable coatings. Advises on structural and low observable repair, modification, and corrosion protection treatment with respect to original strength, weight, and contour to maintain structural and low observable integrity. Ensures aircraft component balance is maintained. Assembles repairs using special fasteners and adhesives. Checks repairs for serviceability according to specifications and technical publications. Manufactures jigs, fixtures, forms, and molds.

4.2.2. Paints aircraft, missiles, and support equipment (SE). Identifies, removes, and treats corrosion using mechanical and chemical procedures. Applies corrosion protective and low observable coatings. Applies aircraft paint schemes and markings.

4.2.3. Uses metalworking equipment and tools to form, cut, bend, and fasten replacement or repair parts to damaged structures and components. Fabricates, repairs, and assembles tubing and cable assemblies for aerospace weapon systems and SE. Maintains and inspects tools and equipment. Performs operator maintenance and service inspections on shop equipment and tools. Ensures lockout and tagout procedures are accomplished prior to performing shop equipment maintenance. Stores, handles, and disposes of hazardous waste and materials according to environmental standards.

4.2.4. Inspects structures and components and determines operational status. Interprets inspection findings, and determines corrective action. Posts entries and maintains maintenance and inspection records. Recommends methods to improve equipment performance and maintenance procedures. Uses automated maintenance systems. Inputs, validates, and analyzes data processed to automated systems. Clears and closes out completed maintenance discrepancies in automated maintenance systems.

5. Skill/Career Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential that everyone involved in training do their part to plan, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives necessary training at appropriate points in their career. The following narrative and AFSC 2A7X3 career field table identify the skill/career progression.

5.1. **Apprentice (3) Level.** Following Basic Military Training, initial skills training will be provided in a resident course at Detachment 2, 361st Training Squadron, Naval Air Station, Pensacola, Florida. The course will lay the foundation for additional training at the graduate's first duty assignment. Trainees will utilize the Career Development Course (CDC), task qualification training, and other exportable courses to progress in their career field. Once the trainer task certifies the trainee, the trainee may perform the task unsupervised.
5.2. **Journeyman (5) Level.** Once upgraded to the 5-level, the journeyman will enter into continuation training to broaden their experience base by increasing their knowledge and skill in troubleshooting and solving more complex problems. Five-levels may be assigned job positions such as quality assurance and various staff positions. After having 48 months in the Air Force, 5-levels will attend Airman Leadership School (ALS) to enhance their Professional Military Education (PME). Five-levels will be considered for appointment as unit trainers. Individuals will use their CDCs to prepare for Weighted Airman Promotion testing. They should also consider continuing their education toward a Community College of the Air Force (CCAF) degree.
5.3. **Craftsman (7) Level.** A craftsman can expect to fill various supervisory and management positions such as shift leader, element chief, flight chief, task certifier, and various staff positions. Exportable MDS specific courses and MAJCOM/unit directed courses are also available. Seven-levels should take courses or obtain added knowledge in management of resources and personnel. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will attend the Noncommissioned Officer Academy.
5.4. **Superintendent (9) Level.** A 9-level can be expected to fill positions such as flight NCOIC, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will attend the Senior Noncommissioned Officer Academy. Additional higher education and completion of courses outside their career AFS is also recommended.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Aircraft Structural Maintenance career field. The spectrum includes a strategy for when, where, and how to meet these training requirements. The strategy must ensure we develop affordable training, eliminate duplication, and prevent a fragmented approach to training. The following training decisions were based on a career field Utilization and Training Workshop (U&TW) held 6-14 October 1997 at Naval Air Station, Pensacola, Florida.
6.1. **Initial Skills.** The 3-level initial skills training course was revised to expand training on advanced composites and low observable. MRT requirements were defined and task certification will be done on making aircraft tubing assemblies, non-flush patches, pull-thru and mechanical rivets, mechanical removal of corrosion, aircraft and equipment forms, using and maintaining HVLP spray guns, and selected shop equipment. Also, task requirements for a future Special Access Required (SAR) course were identified for trainees with end assignments to LO bases (Attachment 3). However, due to the extensive time needed to determine security clearance requirements for the SAR tasks, the proficiency codes for the proposed SAR course are not

shown in this CFETP. Proficiency codes for SAR tasks to be included in the proposed course will be added to the CFETP via change when the SAR clearance requirements are determined.
6.2. **Five Level Upgrade Requirements.** A new 5-level CDC was developed to provide knowledge training to support OJT and core task qualification training. The CDC will include knowledge on: balancing control surfaces, repairing advanced composites, low observable, aircraft wash management, and repairs on conventional composites. Shop mathematics was removed from the 5-level CDC. The following mandatory Air Force core tasks were identified for upgrade to the 5-level: inventory of CTK's, reporting lost tools, foot shear, rotary punch, scroll shear, cornice brake, box/pan brake, throatless shear, pedestal grinder, band saw, stationary sander, slip roll former, drill press, HVLP, vacuum system, weight scale, pit depth gauge, use of TOs, performing corrosion inspections of aircraft surfaces and structures, classify damage to metals and composites, use of 781A, 781H, and 781K forms, opening and closing discrepancies in CAMS and GO81, mechanical removal of corrosion, mechanical sanding, identifying metals, interpreting blueprints, developing repair layouts, cutting sheet metal, machine forming parts, installing/removing solid, mechanical, and hi-lok rivets, performing flush, non-flush, and sealed structural skin repairs, selecting materials, and using hand tools to repair aircraft tubing assemblies.
6.3. **Seven Level Upgrade Requirements.** MAJCOMs decided to eliminate all material on advanced composites except develop layout for repairs and ply orientation from the existing 7-level CDC and make completion of the generic 2AX7X Aerospace Maintenance Craftsman CDC mandatory for upgrade training. The 7-level in-residence course will provide training in classifying damage to advanced composites, evaluating aircraft damage, reading blueprints, and repairing advanced composite structures.
6.4. **Continuation Training.** Any additional knowledge and skill requirements that were not taught through initial or upgrade training are assigned to unit training or Training Detachments. The purpose of the continuation training program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMs develop a proficiency training program that ensures individuals in the Aircraft Structural Maintenance career field receive the necessary training at the appropriate point in their career. The program identifies both mandatory and optional training requirements.

7. Community College of the Air Force. Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree. In addition to its associates degree program, CCAF offers the following:
7.1. **Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the Basic Instructor Course (BIC) and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.
7.2. **Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.3. **Degree Requirements.** All airmen are automatically entered into the CCAF program. Prior to completing an associates degree, the 5-level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective (Technical Education; Leadership, Management, and Military Studies; or General Education)	15
Total	64

7.3.1. **Technical Education** (24 Semester Hours): Completion of the J3ABP2A733 001 apprentice course satisfies some semester hours of the technical education requirements. A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective courses.
7.3.2. **Leadership, Management, and Military Studies** (6 Semester Hours): Professional military education and/or civilian management courses.
7.3.3. **Physical Education** (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training.
7.3.4. **General Education** (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the CCAF General Catalog.
7.3.5. **Program Elective** (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree applicable technical credit otherwise not applicable to this program may be applied. See the CCAF General Catalog for details regarding the Associates of Applied Science for this specialty.
7.4. **AETC Instructor Requirements:** Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command instructor should be actively pursuing an associates degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Path

8.1. **Enlisted Career Path.** Table A8.1 identifies career milestones for the 2A7X3 Air Force Specialty.

Table 8.1 Enlisted Career Path

Education and Training Requirements	Grade Requirements			
	Rank	Average Sew-On	Earliest Sew-On	High Year Of Tenure (HYT)
Basic Military Training School				
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 15 months on-the-job training. - Complete all 5-level core tasks on one MDS. - Complete appropriate CDC if/when available.	Amn A1C SrA	6 months 16 months 3 years	28 months	10 Years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).				
Trainer - Qualified and certified to perform the task to be trained. - Have attended the formal trainer's course and appointed in writing by Commander.	**Certifier** - Be at least a 5-skill level SSgt; and qualified and certified to perform the task being certified - Attend formal certifier course and appointed in writing by Commander. - Be a person other than the trainer.			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt. - Complete all 5- and 7-level core tasks on one MDS. - 18 months OJT. - Complete appropriate CDC if/when available. - Advanced Technical School.	SSgt	7.5 years	3 years	20 Years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	12.5 years 16 years	5 years 8 years	20 Years 24 Years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt Selectee. - A percentage of top non-select (for promotion to E-8) MSgts attend the SNCOA each year. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	19.2 years	11 years	26 Years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	21.5 years	14 years	30 Years

8.2. Base/Unit Education and Training Manager Checklist:

Table A8.2. Base/Unit Education and Training Manager Checklist		
Requirements for Upgrade to:	**Y**	**N**
Journeyman - Has the apprentice completed mandatory CDCs, if available? - Has the apprentice completed all appropriate 5-level core tasks identified in the CFETP? - Has the apprentice completed all other duty position tasks identified by the supervisor? - Has the apprentice completed 15 months training (9 months for retrainees) for award of the 5-skill level? - Has the apprentice met mandatory requirements listed in specialty description AFMAN 36-2108 (Airman Classification) and the CFETP? - Has the apprentice completed CAMS Course J6AZU00066-058 (if applicable)? (Exception: AMC and AMC gained ANG/AFRC Personnel) - Has the apprentice been recommended by their supervisor?		
Craftsman - Has the journeyman achieved the rank of SSgt? - Has the journeyman completed mandatory CDCs? - Has the journeyman completed all core tasks identified in the CFETP? - Has the journeyman completed all other duty position tasks identified by the supervisor? - Has the journeyman completed CAMS Course J6AZU00066-062 (if applicable)? (Exception: AMC and AMC gained ANG/AFRC personnel) - Has the journeyman attended 7-skill level Craftsman Course? **First, they must complete:** -- All 7-level training requirements listed in the CFETP. -- All applicable CDCs. -- A minimum of 12 months UGT (6 months for retrainees). - Has the journeyman completed a minimum 18 months UGT (12 months for retrainees) for award of the 7-skill level?		

TO: Squadron/CC
FROM: Squadron Training Manager
SUBJECT: Upgrade Trainee

Trainee is prepared to be upgraded and has completed all training requirements.

_____ _____

Training Manager Supervisor

Section C - Skill Level Training Requirements

9. Purpose. Skill level training requirements in the 2A7X3 career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

10. Specialty Qualification:

10.1**. Apprentice Level Training:**

10.1.1. **Specialty Qualification.** This information is located in the official specialty description in AFMAN 36-2108, paragraph 3.

10.1.1.1. **Knowledge**. Knowledge is mandatory of: aircraft construction features; identification and characteristics of aerospace materials; repair of metal, tubing, cable, plastic, fiberglass, bonded honeycomb, and composite structural components; shop drawing and sheetmetal layout techniques; shop mathematics; corrosion identification, removal, repair, and prevention; cleaning of metals; application of protective coatings, low observable materials, and markings; proper use, mixing, and storage of acids, solvents, alcohol, caustics, primers, and paints; and proper handling and disposal of hazardous waste and materials.

10.1.1.2. **Education**. For entry into this specialty, completion of high school with courses in mathematics, algebra, chemistry, physics, mechanical drawing, and metal working is desirable.

10.1.1.3. **Training**. For award of AFSC 2A733, completion of the Aircraft Structural Maintenance Apprentice course is mandatory.

10.1.1.4. **Experience.** None.

10.1.1.5. **Other**. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards*, is mandatory.

10.1.2. **Training Sources and Resources.** The 3-level initial skills course will provide the required knowledge, qualification, and, if applicable, certification.

10.1.3. **Implementation.** Upon graduation from Basic Military Training (BMT), completion of J3ABP2A733 001 is required to satisfy the knowledge and training resource requirements for award of the 3-skill level.

10.2. **Journeyman Level Training:**

10.2.1. **Specialty Qualification.** This information is located in the official specialty description in AFMAN 36-2108, paragraph 3.

10.2.1.1. **Knowledge.** A 5-skill level must possess knowledge of: aircraft construction features; identification and characteristics of aerospace materials; repair of metal, tubing, cable, plastic, fiberglass, bonded honeycomb, and composite structural components; shop drawing and sheetmetal layout techniques; shop mathematics; corrosion identification, removal, repair, and prevention; cleaning of metals; application of protective coatings, low observable materials, and markings; proper use, mixing, and storage of acids, solvents, alcohol, caustics, primers, and paints; and proper handling and disposal of hazardous waste and materials.

10.2.1.2. **Education.** There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree is desirable.

10.2.1.3. **Training.** For award of AFSC 2A753, the 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the

core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base, and provides more in-depth knowledge to support OJT requirements.
10.2.1.4. **Experience.** Qualification in and possession of AFS 2A733. Also, experience in functions such as fabricating, repairing, assembling, or installing aircraft metals, plastics, fiberglass, composites or honeycomb parts; or corrosion identification, removal, and applying coatings and markings. Completion of all 5-level core tasks on one MDS aircraft identified in the STS is mandatory.
10.2.1.5. **Other.** For award and retention of this specialty, normal color vision as defined in AFI 48-123 is mandatory.
10.2.2. **Training Sources and Resources.** A minimum of 15 months on-the-job training, completion of the 2A753 CDC and 5-level core tasks represent the resources needed for award of the 5-skill level.
10.2.3. **Implementation.** Training to the 5-level is performed by the units utilizing this STS, exportable courses, and CDCs. Upgrade to the 5-level requires completion of the 2A753 CDC and 15 months upgrade training.
10.3. **Craftsman Level Training:**
10.3.1 **Specialty Qualification.** This information is located in the official specialty description in AFMAN 36-2108, paragraph 3.
10.3.1.1. **Knowledge.** A 7-level must possess knowledge of: aircraft construction features; identification and characteristics of aerospace materials; repair of metal, tubing, cable, plastic, fiberglass, bonded honeycomb, and composite structural components; shop drawing and sheetmetal layout techniques; shop mathematics; corrosion identification, removal, repair, and prevention; cleaning of metals; application of protective coatings, low observable materials, and markings; proper use, mixing, and storage of acids, solvents, alcohol, caustics, primers, and paints; and proper handling and disposal of hazardous waste and materials.
10.3.1.2. **Education.** There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree is desirable.
10.3.1.3. **Training.** Completion of CDCs 2A773 and 2AX7X, certification of Air Force directed 5- and 7-level core tasks on one MDS, and required duty position training represent the resources required for award of the 7-skill level.
10.3.1.4. **Experience.** Qualification in and possession of AFS 2A753. Also, experience supervising functions dealing with corrosion identification, prevention, and repair; applying protective coatings and markings; or fabricating, assembling, and repairing metal, fiberglass, composites, honeycomb, and plastics. Completion of all 5- and 7-level core tasks on one MDS aircraft identified in the STS is mandatory.
10.3.1.5. **Other.** For award and retention of this specialty, normal color vision as defined in AFI 48-123 is mandatory.
10.3.2. **Training Sources and Resources.** Completion of the J3ACP2A773 000 course at Naval Air Station, Pensacola, Florida, completion of CDCs 2A773 and 2AX7X, along with supervisor certification of Air Force directed core tasks, represent the sources required for award of the 7-skill level. The Course Objective List (COL) in Part II lists the training rendered at the 7-level resident course at Naval Air Station, Pensacola, Florida.
10.3.3. **Implementation.** Upgrade to the 7-level will require completion of all AF core tasks, 18 months OJT as a SSgt or SSgt selectee, completion of the 7-level CDCs and resident 7-level course at Naval Air Station, Pensacola, Florida. Completion of AF core tasks, 7-level CDCs, and

12 months OJT as a SSgt or SSgt selectee (6 months for retrainee) will be completed before attending the resident course.

10.4. **Superintendent Level Training:**

10.4.1 **Specialty Qualification.** This information is located in the official specialty description in AFMAN 36-2108, paragraph 3.

10.4.1.1. **Knowledge.** Knowledge is mandatory of: aircraft structural repair, metals processing, corrosion control, fabric and rubber repair, and non-destructive inspection methods; characteristics of metals identification; concepts and application of maintenance directives; maintenance data reporting; and proper use, handling, and disposal of hazardous waste and materials.

10.4.1.2. **Education.** There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree is desirable.

10.4.1.3. **Training.** For award of AFSC 2A790, completion of the Senior NCO Academy in residence and unit OJT is mandatory.

10.4.1.4. **Experience.** For award of AFSC 2A790, qualification in and possession of AFSC 2A771, 2A772, 2A773, or 2A774 is mandatory. Also, experience in managing or directing functions such as structural maintenance, metals technology, survival equipment, or non-destructive inspection specialties are mandatory.

10.4.1.5. **Other.** Not Used.

10.4.2. **Training Sources and Resources.** Instruction received at the Senior NCO Academy and duty position qualification represent the required sources for upgrade to the 9-skill level.

10.4.3. **Implementation.** The 9-level will be awarded after completing MAJCOM requirements, unit OJT, and promotion to SMSgt. Individuals will attend the Senior NCO Academy after they are selected for promotion to SMSgt.

Section D - Resource Constraints

11. Purpose. This section identifies known resource constraints which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

12. Apprentice Level Training:

12.1. **Fundamental Training Requirements Constraints.** Insufficient equipment, facilities, student man-years, and instructor authorizations.

12.1.1. **Impact.** Cannot train to MAJCOM desired proficiency levels without additional facilities, equipment, and instructor authorizations.

12.1.2. **Resources Required.** Fluke Meters (12), Line Stabilizers (13), Pneumatic Rivets (9), Spray Gun Cleaning Units (5), and Heat Lamps (26).

12.1.3. **Action Required.** 361 TRS to work with MAJCOM Functional Managers to acquire 17 student man-years, 3 instructor authorizations, additional facility space, and equipment needed to conduct the initial skills course.

12.1.4. **OPR/Target Completion Date.** January 2000

13. Five-Level Training: There are no constraints.

14. Seven-Level Training. There are no constraints.

Section E. - Transitional Training Guide. There are no transition training requirements. This area is reserved.

PART II

Section A - Specialty Training Standard

1. Implementation. This STS will be used for technical training provided by Air Education and Training Command for classes beginning 25 November 1998 and graduating 16 March 1999.

2. Purpose. As prescribed in AFI 36-2201, this STS:
2.1. Lists in the column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties in the 3-, 5-, and 7-skill level. An asterisk (*) before the number indicates a wartime course objective.
2.2. Identifies in column 2 (Core Tasks), by asterisk (*), specialty-wide training requirements. Core tasks identified with an */R are optional for the AFRC and the ANG. As a minimum, certification on all core tasks applicable to the specialty must be completed for skill level upgrade. Exemptions:
2.2.1. Core tasks which are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training).
2.2.2. For units with more than one MDS aircraft, upgrade trainees need only complete core tasks on a single MDS. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional MDSs, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one MDS. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.
2.2.3. Units that use the GO81 maintenance data collection system do not need to complete Core Automated Maintenance System (CAMS) Computer Based Training (CBT) core tasks. However, these units must be capable of training CAMS related CBT core tasks for deployment preparation. This capability ensures GO81 users are capable of operating CAMS prior to deploying to CAMS using units. This requirement will remain in effect until GO81 and CAMS are converted to the Integrated Maintenance Data System (IMDS).
2.3. Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification completed date.
2.4. Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as result of training on the task/knowledge and the career knowledge provided by the correspondence course. When two codes are used in columns 4A and 4C (e.g. 2b/b), the first code is the established requirement for resident training on the task/knowledge, and the second code indicates the level of training provided in the course due to equipment shortages or other resource constraints. See CADRE/AFSC/CDC listing maintained by the unit training manager for current CDC listing.
2.5. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.
2.6. **Job Qualification Standard**. Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to

AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

2.6.1 **Documentation.** Document and certify completion of training IAW AFMAN 36-2247, Chapter 5. Automated records, utilizing Core Automated Management System (CAMS) or Integrated Maintenance Data System (IMDS)/Global Combat Support System (GCSS), reflecting this STS may be used and are highly encouraged. Use of attachments one and two are mandatory in individual training records along with CFETP Part I and Part II, Section A. Identify duty position requirements by circling (in pencil) the subparagraph number next to the task statement. As a minimum, complete the following columns in Part 2 of the CFETP: date training completed, trainee initials, trainer initials, and certifier initials (core tasks only). Trainers may sign off non-core and non-critical tasks by initialing the trainer's column; third party certification is not required for non-core and non-critical tasks. There are no approved AFJQS for this AFSC.

2.6.1.1. **Converting from Old Document to CFETP.** All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications.

2.6.1.1.1. For those core and critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and certifier's initials. Remember, during the transcription process no training is taking place. Therefore, the trainer's initials are not required.

2.6.1.1.2. For non-core and non-critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and trainer's initials.

2.6.1.1.3. When transcribing previous certification for tasks not required in the current duty position, carry forward only the previous completion date of certification (not the initials of another person). If and when transcribed tasks become duty position requirements, recertify using standard certification procedures.

2.6.1.1.4. The person whose initials appear in the trainer or certifier block during the transcription process must meet the requirements of their respective roles.

2.6.1.1.5. Upon completion of the transcription process, give the old CFETP to the member.

2.6.1.2. **Documenting Career Knowledge.** When a CDC is not available: the supervisor identifies CFETP Part II training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFI 36-2108. For two-time CDC course exam failures: Supervisors identify all Part II items corresponding to the areas covered by the CDC. The trainee completes a study of references, undergoes evaluation by the task certifier, and receives certification on the CFETP Part II. ***Supervisors must document successful completion of career knowledge prior to submission of a CDC waiver.***

2.6.1.3. **Decertification and Recertification.** When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using automated system. Appropriate remarks are entered on the AF Form 623A, **On-The-Job Training Record Continuation Sheet**, as to the reason for decertification. The individual is recertified (if required) either by erasing the old

entries and writing in the new or by using correction fluid/tape (if the entries were made in ink) over the previously certified entry.

2.6.2. **AF Form 797.** When additional items not listed in the CFETP Part II are necessary in the current duty assignment, enter them on the AF Form 797. Fill out the form IAW AFMAN 36-2247.

2.6.3. **Disposition of Training Records.** Upon separation, retirement, commissioning, or promotion to Master Sergeant (unless otherwise directed by the AFCFM, MAJCOM, unit commander, or supervisor), give the individual their training records. Also, give individuals outdated training records after transcribing records. Do not remove any training records that show past qualifications unless transcribed to a new CFETP/AFJQS. For example, an individual working in a tool crib must maintain documented career field qualifications in case they return to duty on the flightline or in the shop. Supervisors must exercise good judgment when removing training records not needed in current duty positions.

2.7. **Specialty Training Standard.** Is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in chapter 14 of AFI 36-2606, *US Air Force Reenlistment, Retention, and NCO Status Programs*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

3. Proficiency Code Keys. Page 20 indicates level of training and knowledge provided by resident training and career development courses.

4. Recommendations: Report unsatisfactory performance of individual course graduates to the AETC training manager at 361 TRS/TRR, 501 Missile Road, Sheppard AFB TX, 76311-2264, DSN 736-3539. Reference specific STS paragraphs. A customer service information line has been installed for the supervisor's convenience to identify graduates who may have received over or under training on task/knowledge items listed in this training standard. For a quick response to problems, call our customer service information line, DSN 736-5236, any time, day or night.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

JOHN W. HANDY, Lieutenant General, USAF
DCS/Installations and Logistics

3 Attachments
1. Proficiency Code Key
2. Specialty Training Standard (STS)
3. Low Observable STS

This Block Is For Identification Purposes Only		
Name Of Trainee		
Printed Name (*Last, First, Middle Initial*)	Initials (Written*)*	SSAN

Printed Name Of Training/Certifying Official And Written Initials	
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***
N/I	***N/I***

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	**IS EXTREMELY LIMITED** (Can do simple parts of the task. Needs to be told or shown how to do most of the task.)
	2	**IS PARTIALLY PROFICIENT** (Can do most parts of the task. Needs only help on hardest parts.)
	3	**IS COMPETENT** (Can do all parts of the task. Needs only a spot check of completed work.)
	4	**IS HIGHLY PROFICIENT** (Can do the complete task quickly and accurately. Can tell or show others how to do the task.)
*Task Knowledge Levels	a	**KNOWS NOMENCLATURE** (Can name parts, tools, and simple facts about the task.)
	b	**KNOWS PROCEDURES** (Can determine step by step procedures for doing the task.)
	c	**KNOWS OPERATING PRINCIPLES** (Can identify why and when the task must be done and why each step is needed.)
	d	**KNOWS ADVANCED THEORY** (Can predict, isolate, and resolve problems about the task.)
**Subject Knowledge Levels	A	**KNOWS FACTS** (Can identify basic facts and terms about the subject.)
	B	**KNOWS PRINCIPLES** (Can identify relationship of basic facts and state general principles about the subject.)
	C	**KNOWS ANALYSIS** (Can analyze facts and principles and draw conclusions about the subject.)
	D	**KNOWS EVALUATION** (Can evaluate conditions and make proper decisions about the subject.)

Explanations

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the courses or CDCs.

/ This mark is used in course columns to show that training is required but not given due to limitations in resources (3c/b, 2b/b etc.).

Specialty Training Standard

2A7X3

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
ATTACHMENT 2												
NOTE 1: Users are responsible for annotating training references to identify current references pending STS revision.												
NOTE 2: All task and knowledge identified as training requirements in column 4A will be taught during wartime. The 7-level course is not taught during wartime.												
NOTE 3: Users may annotate lists of Training References to identify current references pending STS revision.												
NOTE 4: Core Tasks are identified by an asterisk (*) in the column 2.												
A2.1.	OPERATIONS SECURITY (OPSEC) VULNERABILITIES OF AFSC 2A7X3								A	-	-	-
A2.2.	AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFIs 91-301, 91-302; TOs 00-110N-3 and 42-series; applicable OSHA/AFOSH standards											
A2.2.1.	Hazards of AFSC 2A7X3											
A2.2.1.1.	In shop								A	-	-	-
A2.2.1.2.	Flight line								A	-	-	-
A2.2.2.	Respiratory Protection Equipment								-	B	-	-
A2.3.	HAZARDOUS MATERIALS AND WASTE HANDLING ACCORDING TO ENVIRONMENTAL STANDARDS											
A2.3.1.	Types of hazardous materials/fluids								B	B	-	-
A2.3.2.	Handling procedures								B	B	B	-
A2.3.3.	Storage and labeling								B	B	-	-
A2.3.4.	Proper disposal								B	B	-	-
A2.3.5.	AF Form 55 (Employee Safety and Health Record) TR: AFOSH STDs 161-21, 161-21.1W								-	-	-	-
A2.4.	HAZARDOUS COMMUNICATION TRAINING TR: AFOSH STD 161-21								B	B	-	-
A2.5.	SUPERVISION AND TRAINING TR: AFIs 21-101; 36-2201; AFMANs 36-2108, 36-2248											
A2.5.1.	Accomplish performance feedback, evaluate for compliance with performance standards or technical orders								-	-	-	-
A2.5.2.	Train personnel											
A2.5.2.1.	Determine training requirements								-	-	-	-
A2.5.2.2.	Assign OJT trainers or supervisors								-	-	-	-
A2.5.2.3.	Conduct training								-	-	-	-

Specialty Training Standard

2A7X3

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.5.2.4.	Maintain records								-	-	-	-
A2.5.2.5.	Counsel trainees on training progress								-	-	-	-
A2.5.2.6.	OJT trainer requirements											
A2.5.2.6.1.	Prepare teaching outlines or task breakdowns								-	-	-	-
A2.5.2.6.2.	Provide trainees theory and train on actual equipment								-	-	-	-
A2.5.2.7.	OJT task certifier requirements											
A2.5.2.7.1.	Evaluate trainee's knowledge and abilities								-	-	-	-
A2.5.2.7.2.	Provide supervisor and trainer feedback on results of training provided, and trainee's strengths and/or weaknesses								-	-	-	-
A2.5.3.	Plan and schedule maintenance and repair work											
A2.5.3.1.	Analyze workload requirements								-	-	-	-
A2.5.3.2.	Coordinate with other agencies								-	-	-	-
A2.5.3.3.	Determine or establish priorities								-	-	-	-
A2.5.3.4.	Adjust daily maintenance plans to meet operational commitments								-	-	-	-
A2.5.3.5.	Direct aircraft structural maintenance activities								-	-	-	-
A2.5.3.6.	Direct specialized repair activities								-	-	-	-
A2.5.4.	Manage resources TR: AFMAN 23-110											
A2.5.4.1.	Determine authorized materials with: TR: TO 1-1-691											
A2.5.4.1.1.	Technical Orders								-	B	B	-
A2.5.4.1.2.	QPLs								-	B	B	-
A2.5.4.1.3.	Mil Specs								-	B	B	-
A2.5.4.2.	Maintain equipment accountability								-	-	-	-
A2.5.4.3.	Supplies											
A2.5.4.3.1.	Issue								-	-	-	-
A2.5.4.3.2.	Establish levels								-	-	-	-
A2.5.4.3.3.	Maintain levels								-	-	-	-
A2.5.4.4.	Shelf Life Program								A	B	B	-
A2.5.4.5.	Evaluate maintenance or use of equipment, supplies, or workspace								-	-	-	-
A2.5.4.5.1.	Deficiency Reporting Program								-	-	B	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.5.4.5.2.	Initiate deficiency reports		*						-	-	-	-
A2.5.4.6.	Depot Level Repairables (DLR)								-	-	B	-
A2.5.4.7.	Perform Corrosion Manager responsibilities								-	-	-	-
A2.6.	TOOLS, SHOP, AND SUPPORT EQUIPMENT TR: TOs 1-1A-8, 1-1-691, and applicable -32, -33, -34 series TOs											
A2.6.1.	Consolidated Tool Kits (CTKs)											
A2.6.1.1.	Inventory	*							3c/2b	-	-	-
A2.6.1.2.	Maintain								-	-	-	-
A2.6.1.2.1.	Report lost tools	*							b	-	-	-
A2.6.1.2.2.	Conduct lost tool investigation		*						-	-	-	-
A2.6.2.	Use hand tools TR: TO 32-1-101								3c/2b	B	-	-
A2.6.3.	Maintain tools TR: TO 32-1-101								-	-	-	-
A2.6.4.	Use shop equipment											
A2.6.4.1.	Foot shear	*							3c/2b	B	-	-
A2.6.4.2.	Rotary (turret) punch	*							3c/2b	B	-	-
A2.6.4.3.	Scroll shear	*							3c/2b	B	-	-
A2.6.4.4.	Bar folding machine								2b	B	-	-
A2.6.4.5.	Cornice brake	*							3c/2b	B	-	-
A2.6.4.6.	Box and pan brake	*							3c/2b	B	-	-
A2.6.4.7.	Throatless shear	*							3c/2b	B	-	-
A2.6.4.8.	Dimpling machine								2b	B	-	-
A2.6.4.9.	Grinder (pedestal)	*							3c/2b	B	-	-
A2.6.4.10.	Band saw	*							3c/2b	B	-	-
A2.6.4.11.	Stationary sander	*							3c/2b	B	-	-
A2.6.4.12.	Slip roll former	*							3c/2b	B	-	-
A2.6.4.13.	Shrinking and stretching machine								2b	B	-	-
A2.6.4.14.	Arbor press								2b	B	-	-
A2.6.4.15.	Drill press	*							3c/2b	B	-	-
A2.6.4.16.	Production tubing bender								2b	B	-	-
A2.6.4.17.	Flaring machines								3c/2b	B	-	-
A2.6.4.18.	Plastic media blasting booth								2b	B	-	-
A2.6.4.19.	Plastic media blasting cabinet								2b	B	-	-
A2.6.4.20.	Medium pressure water blaster								A	B	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.6.4.21.	Weld band saw blades								2b	-	-	-
A2.6.4.22.	Coating Application Equipment											
A2.6.4.22.1.	Electrostatic								A	B	-	-
A2.6.4.22.2.	Air assisted airless								-	B	-	-
A2.6.4.22.3.	High volume low pressure								A	B	-	-
A2.6.4.22.4.	Pressure pots								A	B	-	-
A2.6.4.23.	Use/maintain coating application equipment											
A2.6.4.23.1.	Electrostatic								-	-	-	-
A2.6.4.23.2.	Air assisted airless								-	B	-	-
A2.6.4.23.3.	High volume low pressure	*							3c/2b	B	-	-
A2.6.4.23.4.	Pressure pots								-	-	-	-
A2.6.4.24.	Use stencil cutter											
A2.6.4.24.1.	Manual								-	A	-	-
A2.6.4.24.2.	Computerized								2b	B	-	-
A2.6.4.25.	Paint shaker (agitator)								2b	B	-	-
A2.6.4.26.	Pneumatic compactor								-	-	-	-
A2.6.4.27.	Spray gun cleaning unit								2b	B	-	-
A2.6.4.28.	Recovery still (chemical distillation)								-	-	-	-
A2.6.4.29.	Hot bonder								2b/-	B	-	-
A2.6.4.30.	Oven											
A2.6.4.30.1.	Drying								-	B	-	-
A2.6.4.30.2.	Curing								-	B	-	-
A2.6.4.30.3.	Moisture removal								-	-	-	-
A2.6.4.31.	Vacuum system	*							2b	B	-	-
A2.6.4.32.	Weight Measuring Scale	*							2b	B	-	-
A2.6.4.33.	Pit Depth Gauge	*							3c/2b	B	-	-
A2.6.5.	Maintain shop equipment								2b	B	-	-
A2.6.6.	Aircraft wash management								-	B	-	-
A2.7.	TECHNICAL PUBLICATIONS											
A2.7.1.	Use technical publications for: TR: AFIND 0-2, TOs 00-20, 1-1-690, 1-1-691, 1-1-4,1-1-8, 1-1-24, 1-1A -1 series, -3, -23, -4,-6 series and OMMS TOs											
A2.7.1.1.	Maintenance	*							3b/2b	B	-	-
A2.7.1.2.	Illustrated parts breakdown	*							3b/2b	B	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.7.2.	TO improvement procedures								-	A	B	-
A2.8.	INSPECTION TR: TOs 1-1-690, 1-1-691 and -3, -6 and -23 series TOs											
A2.8.1.	Aircraft construction features								A	B	-	-
A2.8.2.	Perform inspection for corrosion and structural damage											
A2.8.2.1.	Surface	*							3c/2b	B	-	-
A2.8.2.2.	Internal structures	*							3c/2b	B	B	-
A2.8.3.	Classify damage (corrosion/structure)											
A2.8.3.1.	Metal structures	*							3c/2b	B	B	-
A2.8.3.2.	Conventional composites	*							3c/2b	B	B	-
A2.8.3.3.	Advanced composites								-	B	B	2b
A2.8.3.4.	Transparent plastics								-	B	-	-
A2.8.4.	Evaluate aircraft damage and determine repair procedures								-	-	-	3c
A2.9.	DOCUMENTATION TR: TO 00-20-5 & -7, 34-1-3, 00-25-252; AFMAN 23-110; and NAVAIR 01-1A-34											
A2.9.1.	Use aircraft forms											
A2.9.1.1.	781A series	*							3c/2b	B	-	-
A2.9.1.2.	781H series	*							-	B	-	-
A2.9.1.3.	781K series	*							3c/2b	B	-	-
A2.9.1.4.	AFTO 95								-	A	-	-
A2.9.1.5.	Use equipment forms (AFTO 244 series)								3c/2b	B	-	-
A2.9.1.6.	Lockout/Tagout								-	-	-	-
A2.9.2.	Use Core Automated Maintenance System (CAMS) TR: AFCSM 21 series; TO 00-20 series											
A2.9.2.1.	Open discrepancies	*							3c/2b	-	-	-
A2.9.2.2.	Close discrepancies	*							3c/2b	-	-	-
A2.9.2.3.	Access applicable CAMS menus and data screens								3c/2b	-	-	-
A2.9.3.	Use G0 81 TR: 80-81/SBSS System Interface Users Guide											
A2.9.3.1.	Open discrepancies	*							-	-	-	-
A2.9.3.2.	Close discrepancies	*							-	-	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.9.3.3.	Access applicable menus and data screens								-	-	-	-
A2.9.4.	Use CAMS supply interface (SBSS) TR: AFCSM 21-563								-	-	-	-
A2.10.	CORROSION PREVENTION AND CONTROL TR: AFOSH STDs 48-1, 127-17, 127-31, 127-43; TOs 1-1-691, 1-1-4, 1-1-8, 1-1-24, 1-1-690 and applicable -3, -23, or equivalent series TOs											
A2.10.1.	Corrosion principles											
A2.10.1.1.	Theory								B	B	-	-
A2.10.1.2.	Types								B	B	-	-
A2.10.1.3.	Factors affecting corrosion								B	B	-	-
A2.10.2.	Corrosion prevention compounds								A	B	-	-
A2.10.3.	Corrosion treatment											
A2.10.3.1.	Apply passivation chemicals								2b	B	-	-
A2.10.3.2.	Remove corrosion (mechanical)	*							3c/2b	B	-	-
A2.10.3.3.	Remove corrosion (chemical)								-	B	-	-
A2.10.4.	Protective coating											
A2.10.4.1.	Score aircraft/support equipment coating								-	-	-	-
A2.10.4.2.	Prepare surface	*							2b	B	-	-
A2.10.4.3.	Prepare coating	*							2b	B	-	-
A2.10.4.4.	Prepare sealants								2b	B	-	-
A2.10.4.5.	Use sealants								2b	B	-	-
A2.10.4.6.	Apply coating	*							2b	B	-	-
A2.10.4.7.	Remove coating											
A2.10.4.7.1.	Dry abrasive blasting								2b	B	-	-
A2.10.4.7.2.	Mechanical sanding	*							2b	B	-	-
A2.10.4.7.3.	Environmentally approved chemicals								-	B	-	-
A2.10.4.7.4.	Wet abrasive blasting								-	A	-	-
A2.10.5.	Apply aircraft markings											
A2.10.5.1.	Stencils											
A2.10.5.1.1.	Manufacture								2b	B	-	-
A2.10.5.1.2.	Apply markings								2b	B	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.10.5.2.	Decals											
A2.10.5.2.1.	Manufacture								2b	B	-	-
A2.10.5.2.2.	Apply								2b	B	-	-
A2.10.5.2.3.	Remove								2b	B	-	-
A2.10.5.3.	Apply tapes, boots, and protective films								-	B	-	-
A2.10.5.4.	Remove tapes, boots, and protective films								-	B	-	-
A2.10.6.	Troubleshoot spray equipment								b	B	-	-
A2.10.7.	Spray pattern defects								A	B	-	-
A2.10.8.	Use Sempens, foam brushes, and rollers								-	A	-	-
A2.11.	Low Observable (LO) familiarization TR: TOs 1-1-691, 1-1A-1, 1-1A-8, 1-1A-9, and applicable structural repair and corrosion control TOs											
A2.11.1.	Define LO								A	B	-	-
A2.11.2.	LO signature sources								A	B	-	-
A2.11.3.	Define Radar								A	A	-	-
A2.11.4.	Radar cross sections								A	B	-	-
A2.11.5.	Radar signature reduction techniques								A	B	-	-
A2.11.6.	Principles of RAM coating removal								-	A	-	-
A2.11.7.	Basic RAM application								-	A	-	-
A2.11.8.	Radar absorbing structure								-	A	-	-
A2.12.	REPAIR, MODIFY, AND FABRICATE METAL PARTS AND ASSEMBLIES OF AIRFRAME STRUCTURES TR: TOs 1-1-691, 1-1A-1, 1-1A-8, 1-1A-9, and applicable structural repair and corrosion control TOs											
A2.12.1.	Identify metals	*							2b	B	-	-
A2.12.2.	Characteristics of metals								B	B	-	-
A2.12.3.	Interpret drawings	*							2b	B	-	-
A2.12.4.	Read blueprints								-	-	B	B
A2.12.5.	Develop layout for repairs	*							3b	B	B	-
A2.12.6.	Develop layout for parts								3b	B	B	-
A2.12.7.	Calculate shop mathematics								2b	-	B	-
A2.12.8.	Cut sheet metal	*							3b	B	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.12.9.	Form metal parts											
A2.12.9.1.	Design molds								-	B	-	-
A2.12.9.2.	Form blocks and templates								-	B	-	-
A2.12.9.3.	Machine form parts	*							3c/2b	B	-	-
A2.12.9.4.	Hand form parts								3c/2b	B	-	-
A2.12.10.	Install and remove fasteners											
A2.12.10.1.	Solid rivets	*							3b	B	-	-
A2.12.10.2.	Microshave fasteners								2b	B	-	-
A2.12.10.3.	Pull thru blind rivets								3c/2b	B	-	-
A2.12.10.4.	Friction lock blind rivets								-	-	-	-
A2.12.10.5.	Mechanical blind rivets	*							3c/3b	B	-	-
A2.12.11.	Hi-shear								b	B	-	-
A2.12.12.	Lockbolt								b	B	-	-
A2.12.13.	Hi-lok	*							3c/2b	B	-	-
A2.12.14.	Jo-bolt								3c/2b	B	-	-
A2.12.15.	Mechanical lock blind bolt								2b/-	B	-	-
A2.12.16.	Aircraft bolts								-	B	-	-
A2.12.17.	Turnlock								2b	B	-	-
A2.12.18.	Nut plates	*							3c/2b	B	-	-
A2.12.19.	Aircraft nuts								-	B	-	-
A2.12.20.	Remove defective screws								-	B	-	-
A2.12.21.	Reshape/blend damaged areas	*							3c/2b	B	-	-
A2.12.22.	Apply aerodynamic smoothing compound								-	B	-	-
A2.12.23.	Perform metal skin repairs											
A2.12.23.1.	Stop drill cracks								A	B	-	-
A2.12.23.2.	Nonflush	*							3c/2b	B	-	-
A2.12.23.3.	Flush	*							3c/3b	B	-	-
A2.12.23.4.	Sealed structural	*							3c/2b	B	-	-
A2.12.23.5.	Combination substructural member								2b	B	-	-
A2.12.23.6.	Cold work holes								-	B	-	-
A2.12.24.	Trim and fit aircraft skins								2b	B	-	-
A2.12.25.	Install access doors											
A2.12.25.1.	Latches								2b	B	-	-
A2.12.25.2.	Hinges								3c/2b	B	-	-

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		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.12.25.3.	Trim and fit access panels								3c/2b	B	-	-
A2.13.	AIRCRAFT CABLE ASSEMBLIES TR: TOs 1-1A-8, 6-3-1, 32A-1, 33A1-4-6-1, and applicable structural repair TOs											
A2.13.1.	Select components								A	B	-	-
A2.13.2.	Fabricate								A	B	-	-
A2.13.3.	Pull test								A	B	-	-
A2.14.	AIRCRAFT TUBING ASSEMBLIES TR: TO 1-1A-8, and applicable -3 series TOs											
A2.14.1.	Select components											
A2.14.1.1.	Material	*							3c/2b	B	-	-
A2.14.1.2.	Hardware	*							3c/2b	B	-	-
A2.14.2.	Fabrication											
A2.14.2.1.	Use hand tools	*							3c/2b	B	-	-
A2.14.3.	Repair											
A2.14.3.1.	Permaswage								-	B	-	-
A2.14.3.2.	Cryofit								-	-	-	-
A2.14.3.3.	Rynglock								-	B	-	-
A2.14.3.4.	Dynatube								-	B	-	-
A2.14.3.5.	Wiggins								-	-	-	-
A2.14.3.6.	Visually inspect and evaluate tubing damage								-	-	-	-
A2.15.	REPAIR CONVENTIONAL AND ADVANCED COMPOSITES TR: TO 1-1-690											
A2.15.1.	Transparencies/structural plastics								-	B	-	-
A2.15.2.	Lightning and Anti Static Wire Mesh								-	A	-	-
A2.15.3.	Solid laminate								-	B	-	-
A2.15.4.	Scarf repair								1b	B	-	-
A2.15.5.	Step repair								1b	B	-	-
A2.15.6.	Overlap repair								-	B	-	-
A2.15.7.	Perform bonded honeycomb surface repair		*						3c/2b	B	-	-
A2.15.8.	Perform bonded honeycomb core repair								1a	B	-	-
A2.15.9.	Trim and fit replacement components								-	B	-	-
A2.15.10.	Balance Control Surfaces								-	-	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.15.11.	Metal bonded honeycomb											
A2.15.11.1.	Trim and fit replacement components								-	B	-	-
A2.15.11.2.	Repair structures		*						3c/2b	B	-	-
A2.16.	Repair advanced composite structures TR: TO 1-1-690											
A2.16.1.	Composite Identification								A	B	-	-
A2.16.2.	Characteristics of composites								A	B	-	-
A2.16.3.	Develop layout for repairs								1a/-	B	B	b
A2.16.4.	Scarf repair								1b/-	B	-	2b
A2.16.5.	Step repair								-	-	-	-
A2.16.6.	Overlap repair								1b/-	-	-	-
A2.16.7.	Cut materials								1a/-	B	-	2b
A2.16.8.	Drying								1a/-	B	-	2b
A2.16.9.	Ply orientation								2b/-	B	B	2b
A2.16.10.	Vacuum bagging								2b/-	B	-	2b
A2.16.11.	Prepare liquid matrix								1a/-	B	-	-
A2.16.12.	Composite storage and handling								1a	B	-	2b
A2.16.13.	Use of adhesives, foams, films and tapes								-	-	-	-
A2.16.14.	Use-Pre-Peg Materials								-	-	-	2b

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1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
ATTACHMENT 3 NOTE 1: Users are responsible for annotating training references to identify current references pending STS revision. NOTE 2: Users may annotate lists of Training References to identify current references pending STS revision. NOTE 3: Core Tasks are identified by an asterisk (*) in the appropriate column.												
A3.	LOW OBSERVABLE SPECIFIC ITEMS											
A3.1.	IDENTIFY, CLASSIFY, AND REPAIR LOW OBSERVABLE MATERIALS TR: TOs 1-1-691, 1-1A-1, 1-1A-8, 1-1A-9, and applicable structural repair and corrosion control TOs											
A3.1.1.	Sealant identification								-	-	-	-
A3.1.2.	Adhesive identification								-	-	-	-
A3.1.3.	Classify types of material								-	-	-	-
A3.1.4.	Classify damage to low observable materials								-	-	-	-
A3.1.5.	Dispose of low observable materials								-	-	-	-
A3.2.	F-117 AIRCRAFT											
A3.2.1.	PERFORM RADAR ABSORBENT MATERIAL (RAM) INSPECTION AND IDENTIFICATION TR: TM 1F-117A-3-3, Chap 1											
A3.2.1.1.	Inspect and identify sheet coating urethane (conductive, resistive, and plain)	*							-	-	-	-
A3.2.1.2.	Inspect and identify spray coatings	*							-	-	-	-
A3.2.1.3.	Inspect and identify sheet coating, silicone (conductive, resistive, and plain)	*							-	-	-	-
A3.2.1.4.	Inspect and identify edge moldings, urethane (conductive, resistive, and plain)	*							-	-	-	-
A3.2.2.	PERFORM RAM ASSESSMENT TR: 1F-F117-3-3-1											
A3.2.2.1.	Calibration and use of 20G585-2 costing thickness tester (JOST gun)		*						-	-	-	-
A3.2.2.2.	Use of 20G692 resistance checker	*							-	-	-	-
A3.2.2.3.	Use of multimeter	*							-	-	-	-
A3.2.2.4.	Perform RAM assessment		*						-	-	-	-
A3.2.3.	RAM COATING REMOVAL TR: TM 1F-117A-3-3, Chap 3											
A3.2.3.1.	Principles of RAM Coating Removal								-	-	-	-

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1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A3.2.3.2.	Hazards associated with the various methods of RAM removal								-	-	-	-
A3.2.3.3.	Manual method	*							-	-	-	-
A3.2.3.4.	Chemical method								-	-	-	-
A3.2.3.5.	Pneumatic method	*							-	-	-	-
A3.2.3.6.	Remove sheet coating, urethane and silicone (conductive, resistive, and plain)	*							-	-	-	-
A3.2.3.7.	Remove BX241 and C199X spray coating (pneumatic)	*							-	-	-	-
A3.2.3.8.	Remove edge moldings	*							-	-	-	-
A3.2.3.9.	Remove antenna coatings								-	-	-	-
A3.2.3.10.	Remove kapton paper and lens coatings								-	-	-	-
A3.2.4.	AIRCRAFT SURFACE PREPARATION AND CLEANING TR: TM 1F-117A-3-3, Chap 3											
A3.2.4.1.	Prepare composite surfaces for RAM application	*							-	-	-	-
A3.2.4.2.	Prepare aluminum surfaces for RAM application	*							-	-	-	-
A3.2.4.3.	Prepare titanium surfaces for RAM application	*							-	-	-	-
A3.2.4.4.	Mixing and application of fillers	*							-	-	-	-
A3.2.4.5.	Mixing and application of conductive topcoatings	*							-	-	-	-
A3.2.4.6.	Inspect composite surfaces and evaluate contour repairs	*							-	-	-	-
A3.2.4.7.	Clean lens and canopy glass								-	-	-	-
A3.2.5.	PERFORM DECAL FILM APPLICATION TR: TM 1F-117A-3-3-1											
A3.2.5.1.	Location and proper placement of appropriate decal film	*							-	-	-	-
A3.2.5.2.	Use wing tip decal template	*							-	-	-	-
A3.2.6.	PERFORM LAYOUT AND CUTTING OF MATERIALS TR: TM 1F-117A-3-3, Chap 7											
A3.2.6.1.	Use sawtooth templates	*							-	-	-	-
A3.2.6.2.	Use straight edge for cutting RAM	*							-	-	-	-
A3.2.6.3.	Use protractor for proper repair angles	*							-	-	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
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		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A3.2.7.	PERFORM RAM APPLICATION TR: TM 1F-117A-3-3											
A3.2.7.1.	Mix and apply adhesives	*							-	-	-	-
A3.2.7.2.	Apply sheet coating, urethane	*							-	-	-	-
A3.2.7.3.	Apply sheet coating, silicone	*							-	-	-	-
A3.2.7.4.	Vacuuming procedures								-	-	-	-
A3.2.7.5.	Mix and apply C199X paste	*							-	-	-	-
A3.2.7.6.	Apply “VEE” door and frame edge moldings, urethane (plain, resistive, conductive)	*							-	-	-	-
A3.2.7.7.	Apply edge moldings, silicone (plain, resistive, conductive)	*							-	-	-	-
A3.2.7.8.	Apply transfer adhesive to Kapton materials								-	-	-	-
A3.2.7.9.	Apply canopy Kapton materials								-	-	-	-
A3.2.7.10.	Apply transparent film to lens								-	-	-	-
A3.2.7.11.	Mask canopy prior to painting or sanding								-	-	-	-
A3.2.8.	PERFORM NON-DIELECTRIC PLANE PROBE REPAIRS TR: TM 1F-117A-3-3											
A3.2.8.1.	Hazards associated with probe repairs								-	-	-	-
A3.2.8.2.	Use special tools associated with probe repairs								-	-	-	-
A3.2.8.3.	Inspect probes and evaluate repairs								-	-	-	-
A3.2.8.4.	Remove probe coating								-	-	-	-
A3.2.8.5.	Prepare probe surface for coating								-	-	-	-
A3.2.8.6.	Cut probe repair material								-	-	-	-
A3.2.8.7.	Mix and apply probe coating adhesive								-	-	-	-
A3.2.8.8.	Apply probe coating and putty								-	-	-	-
A3.2.8.9.	Mask aircraft probes prior to painting or sanding								-	-	-	-
A3.2.9.	PERFORM PITOT PROBE TRANSITIONARY REPAIRS TR: TM 1F-117A-3-3											
A3.2.9.1.	Hazards associated with pitot transitionary repairs								-	-	-	-
A3.2.9.2.	Prepare probe surfaces for repair								-	-	-	-
A3.2.9.3.	Apply repair materials to probetransition area								-	-	-	-

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				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A3.2.9.4.	Repair ceramic area of probe								-	-	-	-
A3.2.9.5.	Inspect and evaluate pitot probe transitionary repairs								-	-	-	-
A3.2.10.	PERFORM PUTTY APPLICATION TR: TM 1F-117A-3-3											
A3.2.10.1.	Perform tape masking of putty seams	*							-	-	-	-
A3.2.10.2.	Putty types								-	-	-	-
A3.2.10.3.	Identify putty type and location	*							-	-	-	-
A3.2.10.4.	Mixing and application of putty	*							-	-	-	-
A3.2.10.5.	Inspection of applied and cured putty	*							-	-	-	-
A3.2.10.6.	Operate RAM Disposal Equipment TR: Operator's Manual								-	-	-	-
A3.3.	B-2 AIRCRAFT											
A3.3.1.	GAP FILLING COMPOUNDS TR: TO 1B-2A-2-52GS											
A3.3.1.1.	Conductive caulk (MS-441)								-	-	-	-
A3.3.1.2.	Use conductive caulk								-	-	-	-
A3.3.1.3.	Use silicone (MS-468)	*							-	-	-	-
A3.3.1.4.	Evaluate damage		*						-	-	-	-
A3.3.1.5.	Removal Procedures	*							-	-	-	-
A3.3.1.6.	Surface preparation	*							-	-	-	-
A3.3.1.7.	Application	*							-	-	-	-
A3.3.1.8.	Skieving	*							-	-	-	-
A3.3.1.9.	Smoothness verification	*							-	-	-	-
A3.3.2.	TAPE APPLICATION TR: TO 1B-2A-51GS											
A3.3.2.1.	Evaluate damage		*						-	-	-	-
A3.3.2.2.	Removal procedures	*							-	-	-	-
A3.3.2.3.	Surface preparation	*							-	-	-	-
A3.3.2.4.	Adhesive application	*							-	-	-	-
A3.3.2.5.	Alignment procedures		*						-	-	-	-
A3.3.2.6.	Application procedures	*							-	-	-	-
A3.3.2.7.	PSA tape	*							-	-	-	-
A3.3.2.8.	Permanent tape	*							-	-	-	-
A3.3.2.9.	Curing	*							-	-	-	-
A3.3.2.10.	Thin tape application	*							-	-	-	-
A3.3.2.11.	Thin tape removal	*							-	-	-	-

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			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A3.3.3. FAIRING COMPOUNDS TR: 1B-2A-2-51GS											
A3.3.3.1. Use fairing compounds	*							-	-	-	-
A3.3.3.2. Evaluate damage								-	-	-	-
A3.3.3.3. Removal procedures								-	-	-	-
A3.3.3.4. Surface preparation								-	-	-	-
A3.3.3.5. Apply fairing compounds								-	-	-	-
A3.3.3.6. Verify smoothness								-	-	-	-
A3.3.4. SPECIALIZED COATING TR: 1B-2A-2-14GS/1-1-8											
A3.3.4.1. Evaluate damage								-	-	-	-
A3.3.4.2. Removal procedures								-	-	-	-
A3.3.4.3. Primer application								-	-	-	-
A3.3.4.4. Conductivity coatings											
A3.3.4.4.1. Conductivity reading requirements								-	-	-	-
A3.3.4.4.2. Application procedures								-	-	-	-
A3.3.4.4.3. Smoothness requirements								-	-	-	-
A3.3.4.5. Anti static coating											
A3.3.4.5.1. Application procedures								-	-	-	-
A3.3.4.5.2. Smoothness requirements								-	-	-	-
A3.3.4.6. Rain erosion coating											
A3.3.4.6.1. Application requirements								-	-	-	-
A3.3.4.6.2. Smoothness requirements								-	-	-	-
A3.3.4.7. High temperature coatings											
A3.3.4.7.1. Application procedures								-	-	-	-
A3.3.4.7.2. Smoothness requirements								-	-	-	-
A3.3.5. RADAR ABSORBING STRUCTURE (RAS) TR: 1B-2A-2-51GS/1-1-690											
A3.3.5.1. Evaluate damage	*							-	-	-	-
A3.3.5.2. Remove damage	*							-	-	-	-
A3.3.5.3. Repair lay-up	*							-	-	-	-
A3.3.5.4. Repair inspection		*						-	-	-	-
A3.3.6. HOT TRAILING EDGE (THE) TILE TR: 1B-2A-2-57GS											
A3.3.6.1. Remove	*							-	-	-	-
A3.3.6.2. Apply adhesive	*							-	-	-	-
A3.3.6.3. Install	*							-	-	-	-

1. Tasks, Knowledge And Technical References		2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
				A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
		5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A3.3.6.4.	Cure	*							-	-	-	-
A3.3.6.5.	Repair HTE using tile putty								-	-	-	-
A3.3.6.6.	Repair HTE using tile plug								-	-	-	-
A3.3.6.7.	Ceramic Matrix Compound								-	-	-	-
A3.3.6.7.1.	Remove and replace ceramic matrix compound	*							-	-	-	-
A3.3.7.	AIR DUCT LINER REPAIR TECHNIQUES TR: 16W14-7-2											
A3.3.7.1.	Evaluate damage								-	-	-	-
A3.3.7.2.	Prepare material								-	-	-	-
A3.3.7.3.	Apply material								-	-	-	-
A3.3.7.4.	Verify repair								-	-	-	-
A3.3.8.	USE SUPPORT EQUIPMENTTR: Owners Manual											
A3.3.8.1.	Hot bonding unit								-	-	-	-
A3.3.8.2.	Roughness gauge	*							-	-	-	-
A3.3.8.3.	Foam gun								-	-	-	-
A3.3.8.4.	Multimeter								-	-	-	-
A3.3.8.5.	Ohm meter								-	-	-	-
A3.3.8.6.	Vacuum heat table								-	-	-	-
A3.3.8.7.	Wet film gauge								-	-	-	-
A3.3.8.8.	Thermocouple weld								-	-	-	-
A3.3.8.9.	Stencil Machine								-	-	-	-
A3.3.8.10.	Environmental control unit								-	-	-	-
A3.3.8.11.	Dry film gauge								-	-	-	-
A3.3.8.12.	Thermal Generator								-	-	-	-
A3.3.8.13.	ETAS system								-	-	-	-
A3.3.8.14.	Magnetic stirrer								-	-	-	-
A3.3.8.15.	Optical Micrometer								-	-	-	-
A3.3.8.16.	Explosive proof heat gun								-	-	-	-
A3.3.8.17.	Radial lock gun								-	-	-	-
A3.3.8.18.	Slump gauge								-	-	-	-
A3.3.8.19.	Gloss meter								-	-	-	-
A3.3.8.20.	Tape cutting machine								-	-	-	-
A3.3.8.21.	AOD Jar Mill								-	-	-	-
A3.3.9.	Blade seal replacement								-	-	-	-

Low Observable Specialty Training Standard

2A7X3

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)			
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A3.3.10 Lightning strike patches								-	-	-	-
A3.3.11. Engineer Support Request (ESR)								-	-	-	-
A3.3.12. Perform L/O coating assessment								-	-	-	-
A3.3.13. Kapton Application TR: 1B-2A-2-51GS								-	-	-	-
A3.3.14. Iron filled elastomer TR: 1B-2A-2-51GS											
A3.3.14.1. Evaluate damage								-	-	-	-
A3.3.14.2. Removal procedures								-	-	-	-
A3.3.14.3. Surface preparation								-	-	-	-
A3.3.14.4. Application procedures								-	-	-	-
A3.3.14.5. Alignment procedures								-	-	-	-

Attachment 3

Section B - Course Objective List

4. Measurement. Each proficiency coded STS task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective consists of a condition, behavior, and standard which states what is expected of the student for each task. The condition is the setting in which the training takes place. The behavior is the action a student must demonstrate to accomplish a task (i.e. remove and install wheel and tire assembly). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained. Each objective uses letter code(s) to identify how it is measured. All objectives use the **PC** code which indicates a progress check is used to measure subject or task knowledge. Progress checks are also used to measure student accomplishment of performance objectives. **W** indicates a comprehensive written test and is used to measure the subject and/or task knowledge at the end of a block of instruction. **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check.

5. Standard. The standard is 70% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individuals progress checklist. The checklist is used by the instructor to document each students progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

6. Proficiency Level. Most task performance is taught to the "2b" or "3c" proficiency level. The "2b" means the student can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step by step procedures for doing the task. The "3c" means the student can do all parts of the task but may need a spot check of completed work (competent). The student should be able to identify why and when the task must be done and why each step is needed.

7. Course Objectives. If you require detailed course descriptions and objectives, please provide a written request to the AETC Training Manager, 361 TRS/TRR, 501 Missile Road, Sheppard AFB TX 76311-2264.

Section C - Support Material

8. The following list of support material is not all inclusive; however, it covers the most frequently referenced areas. Support material is any training package designed to enhance the learning process at any level of training. Refer to the Air Force Education and Training Course Announcements (ETCA) for information on AETC formal courses.
8.1. This paragraph lists the Training Detachment courses and address for points of contact for information on these courses. The address is 372 TRS/CCS, 912 I Avenue, Sheppard AFB, Texas 76311-2361.

COURSE NUMBER	COURSE TITLE	OPR
J4AMF/ASF/AST 2A7X3-001	F-117 Tactical Aircraft Radar Absorbent Material (RAM) ASSESSO	372 TRS
J4AMF/ASF 2A7X3-003	B-2 Advanced Composite Repair	372 TRS
J4AMF/ASF 2A7X3-004	B-2 Low Observable Maintenance	372 TRS
J4AMF/ASF/AST 2A7X3-005	F-117A Low Observable Maintenance	372 TRS
J4AMF/ASF/AST 2A7X3-006	F-117A Low Observable Advanced	372 TRS

Section D - Training Course Index

9. Purpose. This index lists Air Force resident, ECI, and exportable courses used to support training for this specialty. Refer to the Air Force Education and Training Course Announcements (ETCA) for information on AETC formal courses listed below.

9.1. **Air Force In-Resident Courses:**

COURSE NUMBER	TITLE	OPR
J3ABP2A733 001	Aircraft Structural Maintenance Apprentice	361 TRS
J3ACP2A773 000	Aircraft Structural Maintenance Craftsman	361 TRS
J3AZP2A753 000	Aircraft Structural Technology	361 TRS
J3AZP2A753 002	General Advanced Composite Repair	361 TRS

COURSE NUMBER	TITLE	OPR
J3AZP2A753 004	Corrosion Prevention and Control	361 TRS
J4AZT2A753 004	Corrosion Prevention and Control	361 TRS

9.2. **Extension Course Institute (ECI) Courses.**

COURSE NUMBER	TITLE	OPR
CDC 2A753	Aircraft Structural Maintenance Journeyman	361 TRS
CDC 2A773	Aircraft Structural Maintenance Craftsman	361 TRS
CDC 2AX7X	Aerospace Maintenance Craftsman	HQ USAF/ ILMM

9.3. **Exportable Courses.**

COURSE NUMBER	TITLE	OPR	MEDIA
J6ANU2E066-038	AF Technical Order System (General)	362 TRS	CBT
J6ANU2E066-039	AF Technical Order System (Advanced)	362 TRS	CBT
J6AZU2E066-058	AF Maint Data Collection System (CAMS)	362 TRS	CBT
J6AZU2E066-059	AF Maint Data Collection System (CAMS) (781 Forms)	362 TRS	CBT
J6AZU2E066-061	Core Automated Maint System (CAMS) Introduction	362 TRS	CBT
J6AZU2E066-062	Core Automated Maint System (Mid-Level Maint Manager)	362 TRS	CBT
J6AZU2E066-063	Core Automated Maint System (Senior Level Maint Manager)	362 TRS	CBT

9.4. **Courses Under Development/Revision.**

COURSE NUMBER	TITLE	OPR
J3ABP2A733 002	Aircraft Structural Maintenance Apprentice	361 TRS/Det 2
J3AZP2A753 005	Aircraft Metal Bonded Repair	361 TRS/Det 2
J3AZP2A753 006	Aircraft Balancing and Fasteners	361 TRS/Det 2
CDC 2A753	Aircraft Structural Maintenance Journeyman	361 TRS/Det 2

Section E - MAJCOM Unique Requirements.

10. Currently, only Air Combat Command has a MAJCOM mandatory course list (MMCL). MAJCOMs change mandatory course requirements occasionally. Up-to-date ACC requirements can be obtained at http://www.acclog.af.mil/lgq/lgqt/98mmcl.doc. Refer to the HQ ACC MMCL for additional information. The below requirements are current as of 28 Aug 98.
NOTE: As of 14 Dec 99, there are no mandatory MAJCOM course requirements for the 2A7X3 career field.

COURSE NUMBER	TITLE	MDS
2A3X3B-035	F-16 Tactical Aircraft Maintenance	F-16
2A3X3B-036	Advanced Crew Chief	F-16
2A6X1A-101	Tactical Aircraft Maintenance (F110-GE-129 Removal/Installation) (O/M)	F-16
2A6X1A-133	Tactical Aircraft Maintenance (F110-GE-100 Removal/Installation) (O/M)	F-16
2A3X3B-025	F-117 Tactical Aircraft Maintenance (Cross)	F-117